ABSTRACT
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As an assessment tool, portfolios can be used to emphasize the connection to
professional standards and reflect the maturity of academic decisions made by
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teaching and implementation, evaluators are provided with summative
documentation to assess their achievement of program goals. This paper
describes the experience of developing an appropriate assessment tool that
could be used to determine the quality of information provided by students in
their preservice teaching portfolios. This is not meant to be an
all-inclusive program overview of the Individualized Instruction Teacher
Education Program at the University of Tennessee, Knoxville, but is a
documentation of a process with which the program's portfolio assessment can
be assessed. (Contains 3 tables and 13 references.) (Author/SLD)

Portfolio Assessment As Summative Documentation In

A Teacher Preparation Program

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Abstract

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This paper describes the experience of developing an appropriate assessment tool that

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service teaching portfolios. This is not meant to be an all-inclusive program overview of the

Individualized Instruction Teacher Education Program, at the University of Tennessee,

Knoxville, only documentation of a process with which to effectively assess our portfolio

component.

Portfolio Assessment As Summative Documentation In A Teacher Preparation Program

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Portfolios are becoming increasingly widespread in teacher training programs, helping educators to examine their own personal beliefs as well as to provide documentation of their educational growth and development. This assessment process becomes authentic when it occurs in the context of the classroom environment and reflects learning experiences that are documented by the student. The development of a portfolio shifts the ownership of learning onto the student (Wiggins, 1989).

Authentic assessment through portfolio development enables the prospective teachers to integrate theory with practice while encouraging them to reflect upon personal growth as they expand their areas of interest and expertise. With a portfolio, students create a personal assessment document that allows them to investigate their own personal areas of interest while *providing evidence of the preservice teacher's performance as a thinking, problem-solving, and self-evaluating professional* (Mokhtari, Yellin, Bull, and Montgomery, 1996).

Exposing pre-service interns to the process of portfolio development encourages these teachers-in-training to reflect upon their knowledge, skills and classroom practices as they evaluate their abilities. As an assessment tool, portfolios can be used to emphasize the connection to professional standards and reflect the maturity of academic decisions made by the educator in training. By incorporating the portfolio as evidence of teaching and implementation, we are provided summative documentation for the assessment of program goals. Ownership

comes through the interns' ability to reflect and place within the portfolio those items they feel most appropriately reflect their knowledge and abilities.

Background

Although a fairly recent phenomenon, portfolios are becoming more popular in assessing the professional development of preservice teaching interns (Barton & Collins, 1993; Carrol, Pothoff & Huber, 1996; Nettles & Petrick, 1995). According to the National Education Association (1993) portfolios provide a record of learning that focuses on the students' work and their reflection upon that work. This model of assessment can be defined as assessment that allows the student to demonstrate application of knowledge, skills, and attitudes using situations that reflect or simulate actual life experiences. Recording and presenting these experiences presents an extra dimension to the assessment arena (Woodward, 1998). Often, portfolios are seen as an alternative to examinations, giving students a method of documenting their academic progress while showing evidence of what they feel is, or has been, important to their personal development.

At the University of Tennessee, Knoxville, preservice interns in the Individualized Instruction Program, are required to prepare and present before a committee, a teaching portfolio that demonstrates their teaching proficiency and their ability to implement specific teaching strategies. Individualized Instruction is a two-year teacher-training program, which emphasizes the development and use of thirty-one teaching strategies (frameworks) by the preservice educator, working with four elementary schools in the local school district. The goal of the

program is to align theory with practice in a site-based, collaboration, which places the university

student in the elementary classroom environment for an extended period.

With the collaboration of university faculty, elementary school administrators, and

classroom teachers, thirty-one teaching frameworks were identified (See Frameworks, Table 1).

These frameworks are based on four specific objectives and represent those teaching

strategies/practices deemed fundamentally necessary for effective teaching at all grade and

ability levels. All frameworks are introduced during seminars held in the first year. These

framework introduction seminars are presented by: elementary school administrators, classroom

teachers, and graduates of the program. The pre-interns (first year students) are encouraged to

observe and practice the implementation of strategies in the elementary classroom, under the

guidance of supervising teachers. During the second year, the intern is expected to demonstrate

extensive and appropriate knowledge of these frameworks, and reflect upon their abilities to

effectively implement each of these thirty-one strategies. Reflection upon teaching experiences

and abilities is of prime significance to our program. These reflections become the basis for the

development of each intern's personal teaching portfolio.

The purpose of the teaching portfolio is to provide documentation of mastering the goals

and objectives of the program. The portfolio becomes a record of training that focuses on the

interns' work and their reflection upon that work. Their program portfolios link knowledge to

practice, in a format that documents experience, learning, growth, and development. Each intern

is expected to showcase this portfolio at an interview board held at the mid-point of their final

semester of internship. This interview board is composed of elementary school administrators

from the local public schools and university personnel, and provides an opportunity for the intern

to demonstrate their learning, provide evidence of their competence, while orally defend their teaching skills, style, and practices in relationship to the thirty-one frameworks.

Problem

Although we required our students to develop and showcase their personal program portfolio, we had no tool for assessment of this portfolio. In the beginning we implemented a three- level rubric based on basic knowledge, implementation, and expertise. This required each intern to achieve maximum competency in each of the thirty-one program frameworks. Our first attempt to implement this rubric was awkward to score and consumed enormous amounts of time not only in the presentation of each of the thirty-one frameworks by the intern, but also in the compilation of points by the interview board members.

We then shifted to a system based on an accumulation of points, which had little basis for objective reasoning or awarding of assigned points. Interns were asked by the board to present and explain several frameworks. Points were awarded to the interns according to their ability to: show evidence of implementation; discuss the significance of that framework; and answer related questions asked by the board. There was little standardization of questions asked by the board, or agreement upon which specific frameworks would be addressed. Administrators tended to choose those frameworks in which their specifically assigned interns excelled, thus biasing the process. Prompting for answers became problematic, with administrators and interview board members coaching the interns in an attempt to bestow more points for more complete answers. Inter-rater reliability was non-existent. This system became a nightmare of rationalization and we realized that if anyone began to question our ratings, we would have no real basis for

assignment of points, or decisions made necessitating remediation. There was no validity to this process. It was time to develop an assessment tool that met the criteria of our needs and provided a basis for valid assessment.

What We Did

The answer came in the veiled form of a university course assignment. As a project, I was determined to develop and implement an assessment tool that would meet the needs of our program; provide genuine assessment for the interns' portfolio product; be easily explained to both interns and interview board members; and could be implemented with the least amount of apprehension or confusion.

My first step was to determine which of the 31 frameworks could be integrated to form subsets. Based on the four major program objectives, I was able to reduce thirty-one frameworks into twenty-one subsets, these subsets determined by usage and commonalties (See Intern Interview, Table 2).

This still presented a rather large portion of information to be assessed within limited time constraints. Might we be able to determine the effectiveness and the abilities of the interns by allowing them to showcase a majority, but not necessarily all of these subsets? It was decided that the interns must show competency in a minimum of half of the subsets.

Secondly, we needed to determine what guiding principles would be used for the assignment of points. After seeking input from the school administrators involved, it was determined that the rubric should be based on five general principles:

1. The intern's general knowledge and their ability to reflect upon their usage of the frameworks

2. The intern's communication skills

3. The intern's development and implementation of the framework skills across the curriculum

4. Creativity

5. The intern's ability to expand the framework implementation beyond the scope of the textbook or required subject/grade level materials.

Several rough drafts were developed which encompassed these five general principles. Extensive adaptation and revision occurred as these drafts were shared with university instructors as well as elementary school administrators involved with the program. Discussions concerning consistency, validity, ability to score, ease of explanation, and general level of understanding were held. Multiple suggestion and feedback sessions resulted in the development of the holistic rubric now in use (See Intern Scoring Rubric, Table 3).

Implementation

Since the first week with the program, our students had been familiarized with, observing, and working to implement the thirty-one frameworks. Periodically throughout both the pre-intern and intern year, the students were involved in discussion classes and question/ answer sessions pertaining specifically to the frameworks. In December of the Intern (second) year, a portfolio workshop was held which allowed the interns to focus on the process of putting their portfolio materials together in a manner facilitating reflection upon abilities, areas of

strength, and areas of personal need. Two weeks prior to portfolio interviews, the interns were provided with the list of specific interview questions on which they were to focus. At this time, they were briefed on the interview process, given specific times and dates for their interviews, and provided a chance to ask procedural questions. They were informed that each intern would be allowed fifty minutes in which to showcase their portfolio.

In early April of 1999, we implemented the new assessment tool for the first time. This implementation became our field test. On the date of the interview, the interview board members were briefed on the use of the rubric. At this briefing, each interviewer was given the chance to ask questions and receive clarification on the terminology and rating scale. It was explained that discovery questions would be allowed; however, coaching or helping the interns in any way, would not be permitted.

Before a panel of five elementary school principals and one university staff member, each of ten interns presented his/her portfolio. Nine were found to be competent in their knowledge, use, and abilities in using the frameworks. Inter-rater reliability for the interview board was high, all members ranking the interns within a range of two points.

One intern was recommended for minor remediation. A time period for remediation was recommended for this intern, congruent with remediation time lines set by the state evaluation process for new teachers. One week before the dismissal of university classes, this intern was once again interviewed. The follow-up interview panel was composed of the university staff member and two elementary administrators. At that time the intern was found to have successfully completed remediation.

Feedback from interview board members that had participated in previous years was very

positive. Comments included: "Scoring the rubric was much more effective and efficiently done,

with little confusion"; "This is much simpler"; "The point assignments don't leave any margin

for question, now they [the interns] know where they need to work".

Limitations

Although our field test was somewhat limited by the small number of interns within our

program at the time, we feel that pertinent information was attained through this process. This

assessment tool proved to be relevant to our interns' skills, knowledge and understanding of the

thirty-one frameworks, and could be used to authenticate their level of ability in implementation

of the frameworks.

Conclusions and Recommendations

Although we realize that we have the need to repeat this process with subsequent pre-

service groups and interviewers to prove reliability, we are satisfied that we did meet our primary

goal; the development and implementation of a valid assessment tool for the interns' portfolio

presentation.

Using this process we: modified the assessment guidelines to fit the needs of the interns

and the Individualized Instruction Program; adjusted the portfolio assessment to better unite the

opportunities of each intern and their distinctive experiences in the elementary classroom; and

involved persons from all levels of the instructional program in a collaborative process. Bottom

line, we developed and have in-place, a well-rounded assessment tool that measures the

individual abilities of each intern. The ability to interrelate teaching experience with frameworks has become the basis for summative documentation. Interns were later able to take this portfolio and, with minor adjustments, use it to document accomplishments for the purpose of professional hiring and placement in the elementary/middle school classroom.

Recommendations for other programs must include the development of an assessment process relevant to the specifics of their program. Standardized assessment formats will not offer the flexibility needed to appropriately measure individualized experiences.

Next Steps

These results have important implications for our program and have stimulated questions surrounding the implementation of the portfolio process at the pre-intern (first year) level. The reflective process necessary to appropriately fulfill the portfolio process and implement the thirty-one frameworks in the classroom has become invaluable to our graduates. The new state evaluation process is highly dependent upon the teacher's ability to reflect upon personal strengths and weaknesses, to verbalize these realizations, and to build upon strengths as they facilitate remediation where/if necessary. By requiring them to practice this reflective method for two years, our graduates are knowledgeable and prepared to handle the state evaluation process with high levels of confidence in their abilities.

Although our interns were prepared and able to relate the frameworks to their application(s) in the classroom, we're not sure that the pre-interns have the preparation necessary to complete this "in-depth" process. The state evaluation procedure does not require a multiple step process of assessment for pre-interns before their placement in internship; however, we

would like to extend the portfolio process through the pre-intern level. Our next step must be the formulation of an assessment tool and implementation process, appropriate to the developmental level of our pre-intern group.

Even though we have a follow-up process in place that provides information on job placement and satisfaction, we would like to expand this process to determine the correlation of pre-service training with the continued daily use and implementation of the thirty-one frameworks in their classrooms. It would also be interesting to ascertain our graduates' desire and abilities in having their elementary students develop and use portfolios in both a process and product format.

Table 1:

31 Frameworks: Individualized Instruction

Objective 1: To provide participants with specific techniques for learning about the children they will teach, including the identification of interests and special skills/talents, home backgrounds, and community conditions.

A.   Gathering and using demographic data on students (from multiple sources)

B.   Acquiring information about services available for students

C.   Using interest inventories to learn about students' reading habits, hobbies, television-viewing habits, and so on

D.   Involving parents in the instructional program (including the use of parents as resources for instruction)

E.   Using a computer tracking systems to keep student profiles

Objective 2: To provide participants with specific techniques on how to determine differences among learners.

A.   Using journals, logs and progress charting activities

B.   Implementing portfolio assessment

C.   Using video and audio tapes for assessment

D.   Observing children at work and determining academic and other needs

E.   Implementing self-assessment procedures (student and teacher)

F.   Conferencing with students effectively

G.   Developing and using teacher-made tests

H.   Using commercial tests to determine student placement and to use as diagnostic

Instruments

Objective 3: To provide participants with specific planning strategies that lead to

Individualized Instruction in the elementary school classroom

A.   Planning for and maintaining an interactive classroom

B.   Planning daily lessons for large groups, small groups, and where necessary, individual

students

C.   Using the Tennessee Instructional Model (TIM)

D.   Establishing long-range instructional goals and short-term objectives

E.   Developing units and mini-units

F.   Developing instructional objectives that vary in focus, including those built around

interests of students, special needs that students have, objectives calling for students to

analyze what is to be learned, synthesize materials, and evaluate what has been learned

G.   Developing independent tasks and assignments for individual children

Objective 4: To broaden participants' knowledge of teaching strategies and grouping

practices that help attend to individual differences

A.   Implementing cooperative learning groups

B.   Using peer teaching

C.   Providing academic and skills coaching

D.   Setting up learning stations and centers

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E.   Using computers with individuals and small groups

F.   Grouping students according to interest

G.   Using ability grouping appropriately

H.   Employing thematic and project teaching

I.   Setting up various kinds of small groups, including dyads and triads

J.   Using graphic organizers, story frames, webbing and mapping strategies

K.   Using manipulatives and games

Note. From "Ridgedale/Brickey Individualized Instruction Model for the Preparation of Elementary School Educators," by C. Glennon Rowell, 1995, Portfolio Assessment/Evaluation in Teacher Education, p. 4-6. [Brochure] University of Tennessee, Knoxville. Reprinted with permission.

Table 2

Intern Interview

Evidence of **implementation** of the framework <u>must be shown</u> as a portion of your answer to the following questions. Each objective has a required number of questions that must be answered. These requirements are found in parenthesis after each stated objective. You must decide which questions will best showcase your portfolio and your teaching abilities. You will be given 50 minutes to present this information to the interview board. Please prepare accordingly.

You will be assessed on your abilities to: demonstrate/discuss comprehension of the topic; reflect upon your implementation of the framework; demonstrate creativity in your lessons and expand your lesson format beyond the required textbook of your assigned grade level; and discuss the rationale for your topic selections.

Objective 1: Specific techniques for learning about the children you teach. Answer any two (2) of the following:

1-A/B/E. Explain the importance of and how you have implemented the use of demographic data in your classroom. How did you gather/obtain this data ? Include the use of computer generated information/record keeping. Cite specific examples.

1-C. What do you feel is the significance of interest inventories and <u>specifically</u>, how have you used these in your classroom. Show examples.

1-D. What classroom strategies do you use to assure that the students' family will be involved in the child's education? Explain the importance of this and cite specific examples.

(table continues)

Objective 2: Specific techniques on determining differences among learners. Answer any

three (3) of the following.

2-A.   Provide examples of students' use of journals, logs, and progress charts. Explain their

value and application in the classroom. How are these evaluated?

2-B.   What is the significance of students' portfolio assessment? Where can these be used?

How has this been incorporated into your classroom? How would you assess these?

2-C/D. Show us specifics and explain how you have used audio and video tape to determine the

academic needs of your students. Why was this method chosen?

2E.   Why is it important for students to be able to self-assess and how have you used this in

your classroom? What has been the response of your students to this?

2F.   How is conferencing used in your classroom? Show evidence of and cite specific

examples. Has this proven to be effective? Yes/No/Why?

2G/H.   How do you determine when it is best to use a teacher made test as opposed to a

commercial test? Show examples of how you have used both in the classroom and your

rationale for their usage.

Objective 3: Specific Planning Strategies. Choose any two (2) of the following.

3A.   What is your interpretation of an "interactive classroom" and explain how you go about

preparing your classroom and students for this implementation. Cite examples of how

this has been used.

3BCD.   What are the major components of a good lesson plan? Share with us some successful

lesson plans and explain why they were considered successful.

(table continues)

3E.   Share with us a <u>unit</u> of study that you have developed and taught. Explain the goals/

objectives and show student evidence of their involvement with this unit.

3FG.   Often students need to have independent tasks or assignments based on their levels of

ability and special needs. Share with us your experience at developing and implementing

these special assignments. Student work should be included.

Objective 4: Teaching strategies and Grouping Practices.   Choose any four (4) of the

following.

4A.   Define cooperative grouping and explain the pros and cons of this method of teaching.

How have you effectively implemented this in your classroom? What is your students'

comfort level with this process?

4BCD. Explain where peer teaching, academic and skill coaching, and learning centers fit into

the elementary classroom. Cite specific examples and show evidence, of where they

have been developed and used appropriately.

4E.   In your opinion, what teaching functions can technology assist? Explain to us how and

for what purpose this has been done. Show examples of how this has been implemented.

4FG.   What is the importance of grouping students according to abilities? Grouping according

to interests? Explain how you would/have used each of these methods in your classroom

and when/where they would <u>not</u> be appropriate.

4H.   What thematic units have you developed and taught? Explain how these were

incorporated into the classroom and the results of this teaching.

4I.   When is it appropriate to use small groups for teaching? How do you determine who will

work in what group? How do you grade the work done by these groups? Show and

discuss examples of how this has been used.

4J.   Explain the importance of using graphic organizers and show some ways that your

students have used these in your classroom.

4K.   How do you justify the use of games in the classroom? When is it appropriate to use

these and how do you use these? How are these assessed? Show some examples of how

these are used.

Table 3:

Intern Scoring Rubric for the Objectives/Frameworks

Points:	3	2	1
	Demonstrates in-depth knowledge of the topic	Demonstrates appropriate understanding of the topic	Lacks full understanding and can discuss only the basic concepts
	Clear, coherent explanations	Communication is effective	
	Highly skilled and able to self-reflect on the implementation	Has experimented with basic procedures and has partially implemented	Uses the framework at inappropriate time/place. Has been partially successful at implementation
	Able to implement across the curriculum	Implementation is limited to specific disciplines	Implementation limited to specific lessons
	Lessons demonstrate creativity are well designed and technically sound	Lessons are adequately creative show some design skill	Lessons lack originality and skill in construction
	Demonstrates a desire to expand student knowledge beyond the required textbook	Demonstrates some preparation beyond the use of classroom text	"Beyond text" preparation is not documented

(table continues)

Example: **1AB**   **Framework = 2 pts**

Objective 1:   **Objective 2:**   **Objective 3:**   **Objective 4:**

Framework = _____ pts   Framework = _____ pts   Framework = _____ pts   Framework = _____ pts

Framework = _____ pts   Framework = _____ pts   Framework = _____ pts   Framework = _____ pts

Framework = _____ pts   Framework = _____ pts   Framework = _____ pts

                                                                                                    Framework = _____ pts

33-29 Points : Keep up the great work

28-26 Points: Progressing satisfactorily

25-22 Points: Some remediation

               recommended

21-- Points   Extensive remediation

               required

Comments:

Total Points: _____

23

24

References

Barton, J., & Collins, A. (1993). Portfolios in teacher education. *Journal of Teacher Education,* 44(3), 200-210.

Carroll, J.A. , Potthoff, D. & Huber, T. (1996). Learnings from three years of portfolio use in teacher education. *Journal of Teacher Education.* 47(2), 253-262.

Haertel, Edward H. (1999). Performance Assessment and Education Reform. *Phi Delta Kappan,* 80(9), 662-666.

Krause, Suzanne (1996). Portfolios in Teacher Education: Effects of Instruction on Preservice Teachers' Early Comprehension of the Portfolio Process. *Journal of Teacher Education,* 47(2), 130-138.

Mabry, Linda (1999). Writing to the Rubric, Lingering effects of traditional standardized testing on direct writing assessment. *Phi Delta Kappan,* 80(9), 673-679.

Madaus, George F. and O'Dwyer, Laura M. (1999). A Short History of Performance Assessment. *Phi Delta Kappan,* 80(9), 688-695.

Meyer, Debra K. (1999). Preservice teachers' perceptions of portfolios: Process versus Product. *Journal of Teacher Education,* 50(2), 131-139.

Mokhtari, Koulder, Yellin, David, Bull, Kay, and Montgomery, Diane (1996). Portfolio

    Assessment in Teacher Education: Impact on Preservice Teachers' Knowledge

    and Attitudes. *Journal of Teacher Education*, 47 (4), 245-262.

Moss, Pamela A. and Schutz, Aaron (1999). Risking Frankness In Educational

    Assessment. *Phi Delta Kappan*, 80(9), 673-679.

Nettles, D.H. & Petrick, P.B. (1995). *Portfolio development for preservice teachers.*

    Bloomington, IN: Phi Delta Kappa Educational Foundation.

Nagel, N.G., & Engel, J. B. (1992). *Preservice teacher portfolios and professional*

    licensure: A formative report (Report No. SP 033 732). San Franciscio:

    American Educational Research Association. (ERIC Document Reproduction

    Service No. ED 343 902).

National Education Association (1993). Student Portfolios, Washington, D.C.

Rowell, C. G. (1995). Ridgedale/Brickey Individualized Instruction Model for the

    Preparation of Elementary School Educators. *Portfolio Assessment/Evaluation in*

    Teacher Education. [Brochure] College of Education, University of Tennessee,

    Knoxville.

Wiggins, G. (1989, May). A True Test: Toward more authentic and equitable

assessment. *Phi Delta Kappan,* 703-713.

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